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UNDESCRIBED PLANTS FROM GUATEMALA AND
OTHER CENTRAL AMERICAN REPUBLICS.

XXXIV¹

JOHN DONNELL SMITH

Thouinia brachybotrya Donn. Sm.—Folia petiolo parum longiora trifoliolata, foliolis ovato- vel obovato-ellipticis utrinque acutis crenulatis supra puberulis subtus velutinis. Racemi axillares singuli simplices tenues breves densiflori. Samara subsemicircularis, alae latere interiore axin centralem 3-plo superante, exteriore loculum marginante.

Arbor 5-metralis, ramulis novellis petiolis racemis canescentibus. Foliorum juvenilium tantum visorum petiolus 1-2.5 cm. longus, foliola 4-5 cm. longa 16-20 mm. lata pellucido-reticulata, nervis lateralibus utrinsecus 10-12 furcatis marginem attingentibus, petiolulis 1 mm. longis. Racemorum pedunculus 3-6 mm. longus, rhachis 15-22 mm. longa vix 1 mm. crassa, pedicelli e nodulo piloso squama transversim elliptica intus glabra cincto orti 3-4 mm. longi rubiginosi. Sepala 1.5 mm. longa intus glabra. Stamina 1.5 mm. longa, filamentis inferne pilosiusculis, antheris glabris. Ovarii cano-velutini lobi subrhomboidei 2.5 mm. longi apice obtusi axin centralem subaequantess stylum trifidum inferne cano-velutinum paulo superantes. Samara abortione saepe solitaria 20 mm. longa 10 mm. lata velutina tota flabellinervata, alae latere interiore recta, exteriore arcuata, axe centrali incana 5 mm. longa, loculo 6 mm. longo, semine ovali 4.5 mm. longo, testa ferruginea. Petala in exemplis suppetentibus deficientia.

Ad ripas fluminis *Rio Grande* dicti, Depart. Zacapa, Guatemala, alt. 230 m., Jun. 1909, *Charles C. Deam*, n. 6343.

Calopogonium phaeophlebium Donn. Sm.—Foliola elliptico-oblonga utrinque obtusa vel obtusiuscula supra pilis appressis conspersa subtus praeter nervos primarios fulvescentes cano-sericea. Racemi pedunculati foliis longiores remote nodiferi, floribus 1-5-nis subsessilibus minimis. Calycis segmenta tubo paulo longiora. Vexillum calyce parum longius. Legumen fulvo-strigillosum gracillimum polyspermum.

Herba volubilis, caulibus petiolis racemis retrorsum fulvo-pilosis. Foliola membranacea discoloria 5.5-8.5 cm. longa 2-3 cm. lata mucronulata, lateralia

¹ Continued from BOT. GAZETTE 49:458. 1910.

paulo minora inaequilatera subsessilia, nervis lateralibus utrinque 7-8 rectis simplicibus marginem attingentibus subtus conspicuis, petiolo communi 3.5-6 cm. longo, petiolo terminali 6-8 mm. longo, stipulis stipellisque minute setaceis. Racemi pedunculo 2-5 cm. longo computato 12-20 cm. longi, pedicellis vix 1 mm. longis, bracteolis minute setaceis, floribus 7 mm. longis. Calyx fulvo-strigillosus 5 mm. longus, segmentis setaceo-acuminatis, duobus summis usque ad medium connatis. Vexillum violaceum 6 mm. longum alis carinisque longius, lamina fere orbiculari 3 mm. lata exauriculata. Stamen vexillare omnino liberum. Ovarium sericeum, stylo ad medium sensim incrassato. Legumen (in exemplis suppetentibus nondum satis maturum) deflexum lineare 5 cm. longum 3 mm. latum rectum apice falcatum, seminibus circiter 8-10.—*C. racemoso* M. Micheli proximum, floribus tamen *C. galactioidem* Benth. revocantibus. Ad ripas Laguna de Ayarza, Depart. Jalapa, Guatemala, alt. 2440 m., Sept. 1892, *Heyde et Lux*, n. 3742 ex Pl. Guat. quas ed. Donn. Sm.—Cuajiniquilapa, Depart. Santa Rosa, Guatemala, alt. 910 m., Sept. 1893, *Heyde et Lux*, n. 6096 ex Pl. Guat. quas ed. Donn. Sm.—Secanquím, Depart. Alta Verapaz, Guatemala, alt. 570 m., Jan. 1905, *George P. Goll*, n. 226.—Río Torres, San Francisco de Guadalupe, Prov. San José, Costa Rica, alt. 1170 m., Nov. 1894, *Adolfo Tonduz*, n. 8968.

Exemplum Gollianum in herbario Musei Nationalis sub numero proprio 860576 servatur.

Hauya (§ SESSILIFLORAE) **microcerata** Donn. Sm. et Rose.—Folia longiuscule petiolata obovata vel oblongo-obovata supra glabrescentia subtus cinereo-tomentosa. Flores inter maximos. Calycis laciniae tubo bis et ultra superatae pro rata brevissime appendiculatae. Capsula dorso ecarinata.

Arbuscula eschedula Tuerckheimiana, ramulis novellis et alabastris appressocanoque pubescentibus. Folia primum ovalia supra pilosiuscula, demum 7-11 cm. longa 4-6 cm. lata abrupte breviterque cuspidata basi acuta venulis pellucida, nervis lateralibus subrectis utrinsecus 7-9, petiolis gracilibus 3-4 cm. longis tomentulosis, stipulis incurvo-subulatis 2 mm. longis glabris nigris. Calycis pubescentis tubus 8.5-10 cm. longus, laciniae 3.5-4 cm. longae, appendicula 3-4 mm. longa cano-velutina. Petala ovalia 33 mm. longa 23 mm. lata. Antherae 18 mm. longae filamentis aequilongae. Ovarium patule cano-velutinum 11 mm. longum, stigmatibus elliptico 5 mm. longo supra petala vix exserto. Capsula 5 cm. longa, seminibus deficientibus.

Santa Rosa, Depart. Baja Verapaz, Guatemala, alt. 1500 m., Sept. 1888, *H. von Tuerckheim*, n. 1423 ex Pl. Guat. etc. quas ed. Donn. Sm. (Typus).—Cuesta di Quililhá prope Purulá, Depart. Baji Verapaz, Guatemala, alt. 1400 m., Apr. 1905, *H. Pittier*, n. 155.—Canjob, Prov. Chiapas, Mexico, alt. 1350 m., Maj. 1904, *E. A. Goldman*, n. 923.

Exempla nn. 155 et 923 in herb. Musei Nationalis servantur.

Hauya (§ SESSILIFLORAE) **quercetorum** Donn. Sm. et Rose.—Folia ex orbiculari-ovali ovata cuspidata vel saltem acuta basi rotundata vel emarginata supra glabra, costa nervisque subtus ciliatis vel glabrescentibus. Calycis laciniae tubo subdimidio breviores longe appendiculatae. Ovarium pubescens. Capsula inter minores.

E schedula repertorum arbor. Ramuli glabrescentes foliorum cicatricibus arcte notati, partibus novellis cano-hirsutis. Folia subtus plerumque glauca 6–12 cm. longa 5–6.5 cm. lata, nervis lateralibus utrinque 8–9, petiolis pilosis vel glabrescentibus 1.5–2.5 cm. longis, stipulis aristuliformibus vix 1 mm. longis puberulis. Calycis pubescentis vel glabri tubus 7–9 cm. longus, laciniae 3.5–5 cm. longae, appendicula 10–13 mm. longa pubescente vel glabra. Petala 3 cm. longa. Filamenta 24 mm. longa antheris dimidio longiora. Ovarium 10–11 mm. longum, stigmathe ellipsoideo 5 mm. longo paulo exserto. Capsula 3.5 cm. longa, valvis dorso planis, seminibus lanceolatis 15 mm. longis 5 mm. latis acutis, ala basi involuta incrassata latere altero producta.

In quercetis ad declivitates montis *Jumaytepéque* dicti, Depart. Santa Rosa, Guatemala, alt. 1850 m., Mart. 1893, *Heyde et Lux*, n. 4479 ex Pl. Guat. etc. quas ed. Donn. Sm. (Typus); Dec. 1892, *Heyde et Lux*, n. 4336 ex Pl. Guat. etc. quas ed. Donn. Sm.

Hauya (§ SESSILIFLORAE) **ruacophila** Donn. Sm. et Rose.—Folia orbiculari-cordata vel basi rotundata ovalia cuspidata supra glabra subtus costa nervisque dense cano-ciliata ceterum pilis deciduis conspersa. Calycis laciniae tubo subdimidio breviores appendicula elongata cano-ciliatae. Ovarium velutinum. Capsula inter majores.

Arbor mediocris, ramulis novellis velutinis. Folia 5–7 cm. longa 3–6 cm. lata, nervis lateralibus late patulis arcuatis utrinsecus 7–8 et costa subtus conspicuis, petiolis 12–25 mm. longis hirsutis vel velutinis, stipulis aristiformibus 2 mm. longis pubescentibus. Calycis pubescentis tubus 9.5–10 cm. longus, laciniae 5–5.5 cm. longae appendicula 10–12 mm. longa instructae. Petala elliptica 4.5 cm. longa 2.5 cm. lata. Filamenta 25 mm. longa antheris subaequilonga. Ovarium 13–15 mm. longum, stigmathe globoso 8 mm.-diametrali vix exserto. Capsula 6 cm. longa, valvis dorso planis, seminibus oblongis 13 mm. longis 4 mm. latis obtusis, ala basi involuta incrassata latere altero producta.

In silvis ad montem *Volcán Acatenango* dictum, Depart. Zacatepéquez, Guatemala, alt. 1700 m., Mart. 1892, *John Donnell Smith*, n. 2528 ex Pl. Guat. etc. quas ed. Donn. Sm. (Typus).—Alotenango in declivitatibus praeruptis montis *Volcán di Fuego* dicti, Depart. Zacatepéquez, Guatemala, alt. 1300 m., Mart. 1892, *John Donnell Smith*, n. 2527 ex Pl. Guat. etc. quas ed. Donn. Sm.

Hauya (§ SESSILIFLORAE) **lemnophila** Donn. Sm. et Rose.—Folia oblongo-ovata vel -elliptica vel -obovata cuspidata vel saltem acuta basi rotundata vel obtusa supra glabrescentia subtus hirsuta. Calycis laciniae tubo subtriente breviores, appendicula pro rata longissima. Filamenta antheris dimidio longiora. Ovarium hirsutum. Capsula maxima.

E schedula repertorum arbor. Ramuli foliorum subtus nervi petioli uti ovarium patule cinereo-hirsuti. Folia maxima subcoriacea circumscriptione summe variabilia, adulta plerumque oblongo-elliptica 9-15 cm. longa 4.5-7.5 cm. lata nonnunquam subtus glabrescentia, nervis lateralibus subrectis utrinsecus 7-9, petiolis 2.5-4 cm. longis, stipulis aristiformibus 2 mm. longis pubescentibus. Flores e schedula albi. Calycis tubus 7.5-9 cm. longus, laciniae 4.5-5 cm. longae, appendicula in alabastro 16-18 mm. longa in flore 12 mm. longa. Petala 33-35 mm. longa. Filamenta 20 mm. longa, antheris 13 mm. longis. Ovarium 13-14 mm. longum, stigmate vix exserto. Capsula lineari-oblonga 7.5-8 cm. longa, valvis dorso planis, seminibus deficientibus.

Ad ripas lacus *Carrizal* dicti, Depart. Santa Rosa, Guatemala, alt. 1360 m., Maj. 1892, *Heyde et Lux*, n. 2936 ex Pl. Guat. etc. quas ed. Donn. Sm.

Hauya (§ PEDUNCULATAE) **lucida** Donn. Sm. et Rose.—Praeter foliorum nervos subtus glabrescentes omnibus in partibus glaberrima. Folia nitida obovata vel elliptica cuspidata basi acuta. Pedunculus ovario brevior, flore inter minores. Calycis laciniae tubo triente breviores, appendicula brevi.

Arbor 8-10-metralis, coma globosa aut dilatata. Folia juniora nervis subtus puberula, aetate proveciore glabra punctulato-pellucida 8-13 cm. longa 4.5-6 cm. lata, nervis lateralibus utrinsecus 8-9, petiolis 1.5-2.5 cm. longis, stipulis aristuliformibus aegre 1 mm. longis glabris. Pedunculus 4-7 mm. longus. Calycis tubus 4-6 cm. longus, laciniae 3-4 cm. longae, appendicula 3-4 mm. longa. Petala 3 cm. longa. Filamenta 17-19 mm. longa, antheris 20-23 mm. longis. Ovarium 9-12 mm. longum, stigmate supra petala paulo exserto. Capsula 3-4.5 cm. longa, valvis dorso planis, seminibus oblongis 11 mm. longis 3 mm. latis obtusis, testa 4 mm. longa, ala basi involuta incrassata latere altero producta.

Costa Rica, Prov. San José: Río Torres, San Francisco de Guadalupe, alt. 1170 m., Jun. 1893, *Ad. Tonduz*, n. 8005 (Typus); Apr. 1894, *John Donnell Smith*, n. 4801 ex Pl. Guat. etc. quas ed. Donn. Sm.; Oct. 1898, *Ad. Tonduz*, n. 7445 ex Pl. Guat. etc. quas ed. Donn. Sm.: Río Tilirí, Alajuelita, alt. 1000 m., Aug. 1894, *Ad. Tonduz*, n. 8915; Río Virilla, San Juan, alt. 1000 m., Aug. 1896, *Ad. Tonduz*, n. 7285 ex Pl. Guat. etc. quas ed. Donn. Sm.: San José, Nov. 1898, *H. Pittier* (numero deficiente).

Hauyae ad dignoscendas facilius species liceat omnium hucusque cognitarum conspectum proponere.

Sect. I. SESSILIFLORAE Donn. Sm. et Rose.—Flos arcte sessilis.

A. Calycis laciniae inappendiculatae. *H. elegans* Moç. et Sessé

B. Calycis laciniae appendiculatae.

1. Appendiculæ 3-4 mm. longae.

a. Capsularum valvae dorso carinatae. *H. cornuta* Hemsl.

b. Capsularum valvae dorso planae.

H. microcerata Donn. Sm. et Rose

2. Appendiculæ 10-15 mm. longae.

a. Calycis laciniae tubo fere aequilongae.

H. Rodriguezii Donn. Sm.

b. Calycis laciniae tubo multo breviores.

† Capsula 3.5 cm. longa.

H. quercetorum Donn. Sm. et Rose

†† Capsula 7-8 cm. longa.

* Folia ex orbiculari-cordato ovalia.

H. ruacophila Donn. Sm. et Rose

** Folia ex oblongo-ovato oblongo-obovata.

H. lemnophila Donn. Sm. et Rose

Sect. II. PEDUNCULATAE Donn. Sm. et Rose.—Flos distincte pedunculatus.

A. Pedunculus ovario multo longior. *H. Heydeana* Donn. Sm.

B. Pedunculus ovario brevior vel ei subaequilongus.

1. Calycis laciniae inappendiculatae. *H. Bárcenae* Hemsl.

2. Calycis laciniae appendiculatae. *H. lucida* Donn. Sm. et Rose

Sicydium (§ EUSICYDIUM Cogn.) **Tuerckheimii** Donn. Sm.—

Folia maxima oblongo-ovata sensim acuminata supra scabridiuscula subtus pubescentia. Flores masculi in paniculam amplissimam diffuse ramosissimam foliis reductis bracteata digesti glabri minimi. Laciniae calycinae cum corollinis bis longioribus lanceolato-ovatae. Filamenta antheris aequilonga.

Suffruticosum, caulibus cirrhis paniculis sulcatis et petiolis glandulari-pubescentibus fuscis. Folia coriacea integra pedato-7-nervia transversim venosa 12-16.5 cm. longa 7.5-10.5 cm. lata, sinu basilari subrectangulari 1.5-2.5 cm. lato 1-1.5 cm. profundo, petiolis 2-3 cm. longis. Cirrhi 8-14 cm. longi apice bifidi. Paniculae, saltem eae florum masculorum, 3-4 dm. longae, ramis divaricatis bractea foliacea 1-3 cm. longa sustentis, inferioribus 1-1.5 dm. longis, bracteolis lanceolatis petiolatis 10-14 mm. longis, vel linearibus 2-5 mm. longis, pedicellis plerumque confertis capillaribus 1-2.5 mm. longis supra medium articulatis, floribus 3 mm.-diametralibus. Calycis tubus incrassatus patelliformis in sicco nigricans. Corollae laciniae 1 mm. longae reticulatae in

sicco flavicantes. Stamina 0.5 mm. longa. Flores feminini fructusque deficient.

In fruticetis, Cubilquitz, Depart. Alta Verapaz, Guatemala, alt. 350 m., Jul. 1907, *H. von Tuerckheim* (n. II. 1914).

Geophila pleuropoda Donn. Sm.—Tota pilosa. Folia petiolis bis longiora orbiculari-cordata obtusissima. Pedunculi pseudo-axillares folia aequantes vel bis fere superantes, floribus in capitulo subsessilibus quam bractee involucrant foliaceae longioribus. Calycis tubus segmentis triente brevior. Corolla calyce altero tanto vel ultra longior. Antherae brevissimae.

Caules petioli pedunculi bractee flores pilis patentibus bulbosis articulatis purpurellis conspersi. Folia membranacea pellucida utrinque praesertim supra bulboso-strigillosa subtus purpurascencia 2-3.5 cm. longa atque lata, nervis lateralibus utrinque 5-6, petiolis 1-1.5 cm. longis, stipulis caducis. Pedunculi primum terminales deinde caule producto axillares singuli 3.5-5 cm. longi, capitulo hemisphaerico absque corolla 6-7 mm. alto 5-8-floro, bracteis 2 oblongo-ovatis vel oblongo-lanceolatis in petiolum decurrentibus 6-7 mm. longis cito caducis, pedicellis vix 1 mm. longis, floribus 4-5-meris bracteola lineari 3 mm. longa sustensis. Calycis tubus 2 mm. longus discum vix superans, segmenta lanceolato-oblonga 3 mm. longa erecto-patentia, alterna saepe minora. Corolla 10-12 mm. longa triente lobata, tubo toto infundibuliformi intus glabro, lobis ovato-oblongis obtusis erecto-patentibus. Filamenta 2 mm. longa, antheris oblongo-ellipticis 1 mm. longis semixsertis. Stylus filiformis, ramis 2 mm. longis inclusis totis papillosis. Drupa ignota.

Secus semitam inter Secanquím et Sepacuite, Depart. Alta Verapaz, Guatemala, alt. 1220 m., Febr. 1905, *George P. Goll* (numero deficiente).—Typus in herbario Musei Nationalis sub numero proprio 860647 servatur.

Tabernaemontana (§ EUTABERNAEMONTANA K. Schum.) **Deamii** Donn. Sm.—Folia elliptico- vel obovato-lanceolata apice contracto-acuminata deorsum attenuata. Thyrsi laterales folia subaequant. Calyx inter minimos fere partitus. Corollae tubus cylindraceus gracilis rectus calyce sexies longior lobos proprios subaequans. Antherae sessiles totae fere exsertae. Discus nullus. Stylus elongatus. Folliculi obovoidei cuspidato-acuminati basi acuti.

Frutex 3-metralis omnino glaber. Folia pergamentacea nitida 9-12 cm. longa 2.5-4 cm. lata apice ipso obtusiuscula in eodem jugo saepius inaequimagna, nervis lateralibus utrinque 16-19 sub margine arcuatis et venis erga lucem inspectis pellucidis, petiolis 7-12 mm. longis. Thyrsi 10-12.5 cm. longi, cymulis dichotomis, pedicellis 10-13 mm. longis basi bracteatis. Calyx 2.5 mm. longus, segmentis paene sejunctis obtuse ovatis basi 4-5-glandulosis.

Corollae in sicco albae tubus 15-16 mm. longus 2 mm.-diametralis faucibus pubescens ore tuberculis 10 munitus, lobi dolabriformes apice rotundati. Antherae coeruleae 3 mm. longae ultra medium bifidae. Stylus 10-12 mm. longus, stigmatē 5-apiculato inferne membrana dilatato. Folliculi cuspidē 1 cm. longa addita 6.5 cm. longi cartilaginei nitidi pallescentes 4-costati, seminibus ellipsoideis 5-7 mm. longis striatis ad hilum sulcatis, funiculis pulposis.—Secundum methodum Schumannianam gregi *AaaII3*** adscribenda.

Secus fluvium *Montagua* prope Gualán, Depart. Zacapa, Guatemala, alt. 190 m., Jun. 1909, *Charles C. Deam*, n. 6282.

Lisianthus quichensis Donn. Sm.—Folia lanceolato-oblonga utrinque subsensim acuteque angustata sessilia amplexicaulia. Cymae longe pedunculatae laxae longeque ramosae. Calycis elongati segmenta ecarinata. Corolla calyce 4-plo fere longior, tubo a basi circiter ad trientem altitudinis sensim angustato et ibidem staminifero subinde infundibuliformi, lobis brevibus erectis. Genitalia exserta.

Suffrutex bimetralis glaber, ramis ramulis inflorescentiae axibus teretibus pallido-stramineis, internodiis folia paulo excedentibus, nodis membrana lineari interpetiolarī marginatis. Folia pergamentacea 10-13.5 cm. longa 2.5-3 cm. lata, nervis lateralibus utrinque binis parum manifestis. Cymae pedunculis 5-8 cm. longis computatis 9-17 cm. longae ter quaterve trichotomae, pedicellis 4-7 mm. longis. Calyx 10 mm. longus usque ad $\frac{1}{2}$ partitus, segmentis lineari-lanceolatis filiforme attenuatis hyalino-marginatis. Corolla in sicco flavicans 36-38 mm. longa, tubo tertia parte inferiore crebre nervato, lobis cuspidato-ovatis 5 mm. longis. Stamina ad 11-12 mm. supra basin corollae inserta, filamentis inaequilongis 22-26 mm. longis, antheris exsertis oblongis erectis muticis. Discus nullus. Ovarium oblongo-ovoideum 6 mm. longum, stylo stamina 4 breviora aequante, stigmatē capitato obscure bilobo. Capsula ignota.—*A. L. acuminato* Perk. proximo differt praesertim foliis angustioribus, calyce elongato, genitalibus exsertis.

Río Negro, Depart. Quiché, Guatemala, alt. 1100 m., Apr. 1892, *Heyde et Lux*, n. 2921 ex Pl. Guat. etc. quas ed. Donn. Sm. (Sub *Leiantho brevidentato* Hemsl. olim distributus.)

Lisianthus meianthus Donn. Sm.—Folia oblongo-ovata superne tenuiter deorsum contractius acuminata sessilia amplexicaulia 5-plinervia. Cymae corymbiformes laxiflorae, floribus minimis. Calycis segmenta leviter carinata. Corollae hypocraterimorphae tubus ultra ovarium tenuis faucibus staminiferis vix dilatatus calyce atque lobis propriis bis circiter longior. Genitalia exserta.

Suffruticosus dense ramosus. Rami teretes cum ramulis et inflorescentiae axibus subquadrangularibus puberulentes et fusci, internodiis elongatis, nodis linea elevata interpetiolarī marginatis. Folia pergamentacea 6-10 cm. longa

2.5-3.5 cm. lata, nervis subtus conspicuis longe ascendentibus. Cymae obdeltoideae 7-11 cm. longae repetitis trichotomae, pedicellis vix 1 mm. longis. Calyx 4-5 mm. longus paulo ultra medium fissus, segmentis lanceolatis hyalino-marginatis. Corollae in sicco luteae tubus 10 mm. longus dimidio superiore tenuiter cylindraceus fibroso-nervatus, lobi oblongo-elliptici 4-5 mm. longi sub anthesi expansi. Stamina ad 2 mm. infra os corollae inserta, filamentis aequalibus 3.5 mm. longis, antheris nec recurvis nec apiculatis. Discus nullus. Ovarium calycem subaequans, stylo staminibus aequilongo, stigmate peltato. Capsula oblonga 7 mm. longa reliquiis fibrosis tubi corollae marcidiae vestita.

Sacalal, Depart. Alta Verapaz, Guatemala, alt. 915 m., Jan. 1889, *H. von Tuerckheim*, n. 1436 ex Pl. Guat. etc. quas ed. Donn. Sm. (Sub *Leiantho saponarioide* Griseb. olim distributus.)

Solanum (§ MICRACANTHA Dun.) **purulense** Donn. Sm.—Folia bina ternaque integra nitida pilis sparsis stellatis scabriuscula, altero uti alterum paulo minus lanceolato utrinque praesertim superne acute attenuato, tertio 2-4-plo minore elliptico utrinque acuminato. Racemi laterales stellato-tomentosi, rhachi parce aculeata, pedicellis flore dimidio brevioribus. Calyx inermis.

Rami sarmentosi super frutices reclinati lignosi teretes 5 mm.-crassi aculeati glabri purpurascens apice cum foliis nascentibus stellato-fulvoque-tomentosi, aculeis stramineis e basi compressa 2.5 mm. longa uncinatis 2 mm. longis. Folia dua majora 11-18 cm. longa medio 3.5-6 cm. lata, pilis utrinsecus valde dissitis, costa subtus arcte aculeata, nervis lateralibus utrinque 6-8 subtus parce aculeatis, petiolis 1-2 cm. longis dense aculeatis, folio tertio 3-6 cm. longo 1.5-3 cm. lato breviter petiolato. Racemi 5-6 cm. longi secundiflori, pedicellis 8-10 mm. longis cernuis. Calyx stellato-tomentosus hemisphaericus 4 mm. altus triangulari-dentatus. Corollae rotatae segmenta linearia 18-19 mm. longa 2 mm. lata extus stellato-tomentosa. Filamenta 1 mm. longa, antheris linearibus 12-13 mm. longis apice biporosis. Bacca ignota.—Ad *S. lanceaefolium* Jacq. accedens.

In fruticetis ad Purulá, Depart. Baja Verapaz, Guatemala, alt. 1600 m., Apr. 1907, *H. von Tuerckheim*, n. II. 1751.

Alloplectus metamorphophyllus Donn. Sm.—Folia quam maxime disparia, altero magno elliptico utrinque acuminato perlonge petiolato, altero nano stipulaeformi lanceolato-lineari coccineo prophylla dua aflora sibi ipso omnino similia fulciente. Corymbus in axilla folii majoris subsessilis umbelliformis dense congestiflorus, bracteis bracteolis calycis segmentis supra medium subulato-laciniatis coccineis praeter lineam dorsalem glabris.

Suffrutex in truncis putridis epiphytalis nodis radicanibus longe repens, caule striato glabrescente erubrescente. Folium in pare majus nascens

utrinque densissime stramineo-holosericeum, adultum praesertim subtus glabrescens membranaceum mucro-denticulatum 17-22 cm. longum 8-10 cm. latum, petiolo gracili 7-10 cm. longo glabrescente. Folium nanum cum prophyllis paulo altius sitis lateralibus sessile erectum filiforme productum 3-4 cm. longum 6-8 mm. latum membranaceum praeter lineam dorsalem glabrum. Corymbus subglobosus 2.5-4 cm.-diametralis, pedunculo 6-8 mm. longo et axibus pubescentibus, pedicellis 3-10 mm. longis, bracteis ovalibus vel oblongo-ellipticis 14-16 mm. longis, bracteolis lineari-lanceolatis 15-18 mm. longis subulato-productis. Calycis segmenta fere sejuncta aequalia lanceolato-linearia longe subulato-producta 12-16 mm. longa, laciniis 3-5 mm. longis. Corolla nondum satis evoluta pilosa calyce brevior leviter ventricosa basi vix gibbosa ore obliqua, lobis rotundis brevibus. Antherae liberae breves, loculis parallelis distinctis. Disci glandula solitaria obtuse ovata 2 mm. longa. Ovarium pilosum acuminato-ovoideum 3 mm. longum, stylo 5 mm. longo, stigmatibus bilobis. Fructus coriaceus glaber ovato-globosus 6 mm. longus indehiscens, seminibus funiculo capillari affixis. Flores evoluti ignoti.—Species anormalis.

La Palma, Prov. San José, Costa Rica, alt. 1500-1600 m.: *Adolfo Tonduz*, Sept. 1896, n. 10884; Aug. 1898, n. 12469: *William R. Maxon*, Maj. 1906, n. 364.

Besleria (§ PARABESLERIA Hanst.) **pyncosuzygia** Donn. Sm.—Internodia brevissima. Folium alterum altero subduplo majus coriaceum discolor integrum supra glabrum subtus puberulum oblique lanceolatum utrinque acutum, nervis lateralibus validis utrinsecus 5-6 sub angulo angusto longe ascendentibus. Pedicelli aggregati internodio petiolo flore paulo breviores. Corolla calyce subtriplo longior. Ovarium pilosum.

Suffrutex, caule simplice tetragono nodis incrassato, internodiis 1.5-2.5 cm. longis, partibus novellis canescentibus. Folium in pare majus 10-14 cm. longum 3.5-4.5 cm. latum inaequilaterale, nervis lateralibus subtus prominentibus supra impressis, petiolis 1-2 cm. longis. Pendunculus nullus, pedicellis circiter 6-8-nis 8-18 mm. longis puberulis. Calycis partiti extus puberuli intus pilosi segmenta oblongo-ovata obtusa 7 mm. longa integra margine scariosa, postico minore declinato. Corolla coccinea sericea 21-24 mm. longa, tubo recto superne leviter ampliato vix ventricosa basi defracto postice gibbo, lobis rotundatis subaequalibus. Stamina ad 4 mm. supra corollae basin inserta, antheris cohaerentibus transversim ellipticis, loculis orbicularibus. Discus subaequalis 2 mm. altus antice interruptus. Ovarium ovoideum 3 mm. longum, stylo 1.5 cm. longo. Fructus ignotus.

In silvis ad La Palma, Prov. San José, Costa Rica, alt. 1459 m., Sept. 1898, *Adolfo Tonduz*, n. 12545.

BALTIMORE, MARYLAND